

Table S1. Statistical analysis of reflex and motor development of PEX13 brain mutants

Tested behaviour	Tested degree of response ^a	Day of first appearance ^b		Difference ^c	P-value ^d	Significance ^d
		Controls	Mutants			
Negative geotaxis	1	1.6 ± 0.2	5.3 ± 1.3	3.7	0.0235	*
	5	6.9 ± 0.9	10.6 ± 1.1	3.7	0.0304	*
	9	11.8 ± 0.6	14.0 ± 1.1 ^f	2.2	0.1124	ns
Cliff avoidance	1	2.4 ± 0.4	1.7 ± 0.1	0.7	0.1065	ns
	5	5.9 ± 0.7	9.7 ± 0.7	3.8	0.0053	**
	9	11.8 ± 0.7	16.5 ± 1.4 ^f	4.7	0.0168	*
Vibrissa placing	1	2.1 ± 0.3	2.1 ± 0.3	0	0.8629	ns
	5	5.6 ± 0.5	7.9 ± 0.8	2.3	0.0478	*
	9	10.6 ± 0.6	14.2 ± 0.6	3.6	0.002	**
Visual placing	1	13.4 ± 0.2	14.6 ± 0.3	1.2	0.0101	*
	5	14.2 ± 0.3	16.4 ± 0.6	2.2	0.0112	*
	9	15.3 ± 0.3	17.5 ± 0.5	2.2	0.0083	**
Forelimb grasp reflex	1	1.1 ± 0.1	1.1 ± 0.1	0	0.881	ns
	5	4.0 ± 0.1	4.1 ± 0.1	0.1	0.4345	ns
	9	8.3 ± 0.3	8.6 ± 0.3	0.3	0.6415	ns
Hindlimb grasp reflex	1	4.5 ± 0.5	5.0 ± 0.2	0.5	0.4623	ns
	5	8.1 ± 0.6	9.0 ± 0.5	0.9	0.2389	ns
	9	10.4 ± 0.4	10.6 ± 0.6	0.2	0.7778	ns
Hyperkinesias ^e	1	1.3 ± 0.2	2.2 ± 0.4	0.9	0.0933	ns
	5	4.6 ± 0.1	6.2 ± 0.3	1.6	0.0018	**
	9	6.8 ± 0.3	9.2 ± 0.2	2.4	0.0001	***
	5	10.5 ± 0.5	12.4 ± 0.5	1.9	0.04	*
	1	12.6 ± 0.3	14.5 ± 0.6	1.9	0.027	*
	0	14.8 ± 0.5	16.9 ± 0.7	2.1	0.0288	*
Crossed extensor ^e	5	1.2 ± 0.2	1.3 ± 0.2	0.1	0.8267	ns
	9	2.9 ± 0.9	12.4 ± 3.5 ^f	9.5	0.0287	*
	5	4.8 ± 0.6	5.9 ± 0.6	1.1	0.2061	ns
	1	6.8 ± 0.4	7.5 ± 0.9	0.7	0.4826	ns
	0	8.5 ± 0.7	10.7 ± 0.5	2.2	0.0314	*
Acceleration righting	9	13.1 ± 0.3	14.9 ± 0.4	1.8	0.0113	*
Bar holding ability	1	6.4 ± 0.6	8.2 ± 1.0	1.8	0.1456	ns
	5	10.6 ± 0.6	16.8 ± 0.8	6.2	0.0003	***
	9	15.5 ± 0.5	20.0 ± 0.0 ^f	4.5	0.0008	***
Straight line walking	9	8.6 ± 0.2	9.2 ± 0.3	0.6	0.17	ns

^aScores for first appearance of a response were assigned as follows: 0 = no response, 1 = weak response, 5 = moderate response, 9 = full response.

^bAll data are presented as mean ± s.e.m.; *n* = 5 per group.

^cDifference represents the difference in time (days) of first appearance of the tested behaviour between mutants and littermate controls.

^dDifference was tested for significance using the Student's *t*-test: ns, not significant; **P* < 0.05; ***P* < 0.01; ****P* < 0.001.

^eTests intensify during early development, then weaken, and finally disappear before the end of postnatal development.

^fSeveral mutants failed to develop a full response to this reflex; time difference is partly due to the arbitrary score of 20 given to animals not developing a full response.